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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,534	07/29/2003	Riad Ghabra	LC 0136 PUS	1533

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EXAMINER	
RUTLAND WALLIS, MICHAEL	
ART UNIT	**PAPER NUMBER**
2835	

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/604,534	GHABRA ET AL.	
	Examiner	Art Unit	
	Michael Rutland-Wallis	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 July 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1-13 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokubu et al. (U.S. Pat. No. 5,745,026) in view of Janssen (U.S. Pat. No. 6,958,551).

With respect to claim 1 Kokubu teaches an active keyed locking system (Fig. 1) for a vehicle comprising: a keyed actuated device (Fig 1 item (1 and/or 15); a position sensor (column 5 lines 25-43 Kokubu teaches the microcomputer monitors the position of the ignition switch based on position signal from item 18) proximate to said keyed actuated device and generating a position signal indicative of position of said keyed actuated device; and a controller (Fig. 1 item 17) electrically coupled to said position sensor and enabling (column 5 line 33-35 enabling item 13) at least one vehicle component in response to said position signal. Kokubu does not teach the switch is a non-mechanically operated switch. Janssen teaches a non-mechanical position sensor to non-mechanically detect the position of a keyed actuated device (column 3 lines15-40). It would have been obvious to one of ordinary skill in the art at the time of the

With respect to claim 2 Kokubu teaches the keyed actuated device is a lock assembly (Fig. 1 item 15 see Fig. 4 for greater detail).

With respect to claim 3 Kokubu teaches the keyed actuated device is a key (Fig. 1).

With respect to claims 4 and 5 Kokubu teaches the key comprises a signal generator generating a transmission signal (Fig. 2 item 2 see column 3 lines 1-7) where the transmission on the signal alters the surrounding field.

With respect to claim 6 Kokubu teaches the key comprises a magnetic device (Fig. 1 item 8).

With respect to claim 7 Kokubu teaches the key comprises: a coil (Fig. 1 item 8); and a transponder (Fig. 2 further see column 3 line 66- column 4 line 40) coupled to said coil and generating a transmission signal.

With respect to claim 8 Kokubu teaches the key generates an authorization signal (column 4 lines 11-17), said controller enabling at least one vehicle component (Fig. 1 item 13) in response to said authorization signal.

With respect to claim 9 Kokubu teaches the position sensor is selected from at least one of a series of magnets, a coil, a potentiometer, an encoder, an optical sensor, an infrared sensor, a hall effect sensor, a rotary variable differential transformer, a rotary variable inductance transducer, an angular position sensor, or a revolver (Fig. 4 item 34).

With respect to claim 10 Kokubu teaches the position sensor is coupled within a base station (Fig. 4 shows the position indicator to be coupled within the steering column and further coupled to the cam shaft see column 6 lines 1-25).

With respect to claim 11 Kokubu teaches the controller enables a vehicle component selected from at least one of a vehicle accessory, an ignition, a door lock, and a vehicle system (Fig. 1 item 31) in response to said position signal.

With respect to claim 12 Kokubu teaches the system as in claim 1 further comprising a recognition device (Fig. 1 item 21) recognizing a key and generating a recognition signal wherein said controller enables the active keyed locking system in response to said recognition signal (column 3 line 66- column 4 line 40).

With respect to claim 13 Kokubu teaches the keyed actuated device is a lock assembly (Fig. 1 item 15 see Fig. 4 for greater detail), said lock assembly comprising a key antenna (Fig. 1 item 16 and 2).

With respect to claim 15 Kokubu teaches a method of enabling (column 5 line 33-35 enabling item 13) at least one vehicle component through use of an active keyed locking system (Fig. 1) comprising: actuating a keyed actuated device (Fig 1 item (1 and/or 15); determining position of said keyed actuated device (column 5 lines 25-43 Kokubu teaches the microcomputer monitors the position of the ignition switch based on position signal from item 18) and generating a position signal; and enabling (column 5 line 33-35 enabling item 13) the at least one vehicle component in response to said position signal. Kokubu does not teach determining the position of said keyed actuated device without physically contacting said keyed actuated device. Janssen teaches a

position sensor to detect the position of a keyed actuated device (column 3 lines15-40) without physical contact. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kokubu to use a contact less position determining means in order to increase reliability of the locking system by reducing moving components.

With respect to claim 16 Kokubu teaches a method as in claim 15 further comprising: recognizing a key and generating a recognition signal (Fig. 1 item 21); and enabling an active keyed locking system in response to said recognition signal (column 3 line 66- column 4 line 40).

With respect to claim 17 Kokubu teaches activating a base station (Fig. 4 shows the position indicator to be coupled within the steering column and further coupled to the cam shaft see column 6 lines 1-25) in response to said key recognition.

With respect to claim 18 Kokubu teaches generating a first authorization signal; generating a second authorization signal in response to said first authorization signal; verifying said second authorization signal (column 3 line 66- column 4 line 40); and generating said position signal in response to said verification (column 5 lines 25-43).

With respect to claim 19 Kokubu teaches determining position of said keyed actuated device comprises: generating at least one base signal (code ΔB column 4 line 17-26); altering (code ΔC column 4 line 17-26) said at least one base signal via actuation of said keyed actuated device; and generating (code ΔD column 4 line 17-26) said position signal in response to said alteration of said at least one base signal.

With respect to claim 20 Kokubu teaches at least one base signal is modulated (Fig 2 item 5) using a modulation technique selected from at least one of amplitude modulation (column 4 lines 27-37), frequency modulation, and phase modulation.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kokubu et al. (U.S. Pat. No. 5,745,026) in view of Janssen (U.S. Pat. No.5,836,187).

With respect to claim 14 Kokubu teaches an ignition enabling system (Fig. 1) for a vehicle comprising: a key (Fig. 1 item 1) having a transponder (Fig. 2 further see column 3 line 66- column 4 line 40); a lock assembly (Fig. 1 item 15 see Fig. 4 for greater detail); a position sensor (column 5 lines 25-43 Kokubu teaches the microcomputer monitors the position of the ignition switch based on position signal from item 18) proximate to said lock assembly and generating a position signal indicative of a position of the key; and a controller (Fig. 1 item 17) electrically coupled to said position sensor and enabling (column 5 line 33-35 enabling item 13) at least one vehicle component in response to said position signal. Kokubu does not teach sensing position of said key, in response to a change in an electric field proximate the lock assembly. Janssen teaches a position sensor to detect the position of a keyed actuated device in response to a change in the electro-magnetic field. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kokubu to use a contact less position determining by an electric field detection means in order to increase reliability of the locking system by reducing moving components.

Response to Arguments

Applicant's arguments, filed January 09, 2006 with respect to the rejection of amended claims 1-20 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Rutland-Wallis whose telephone number is 571-

272-5921. The examiner can normally be reached on Monday-Thursday 7:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MRW

LYNN FEILD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800